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10/697,752	10/30/2003	Lawrence D. Bergman	YOR920030395US1	8753	
Robert W. Griff	7590 05/06/200 f ith	EXAMINER			
Ryan, Mason & Lewis, LLP 90 Forest Avenue			DAO, THUY CHAN		
Locust Valley, NY 11560			ART UNIT	PAPER NUMBER	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)		
	10/697,752	BERGMAN ET AL.		
Office Action Summary	Examiner	Art Unit		
	Thuy Dao	2192		
The MAILING DATE of this communication app Period for Reply	pears on the cover sheet with the c	orrespondence address		
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DOWN THE MAILING DOWN THE MONTHS from the mailing date of this communication. If NO period for reply is specified above, the maximum statutory period of Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tinwill apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONE	lely filed the mailing date of this communication. (35 U.S.C. § 133).		
Status				
1) ☐ Responsive to communication(s) filed on 29 Ja 2a) ☐ This action is FINAL . 2b) ☐ This 3) ☐ Since this application is in condition for alloward closed in accordance with the practice under Expression in the condition of the condition of the condition is in condition.	action is non-final. nce except for formal matters, pro			
Disposition of Claims				
4) Claim(s) 29-36 is/are pending in the application 4a) Of the above claim(s) is/are withdray 5) Claim(s) is/are allowed. 6) Claim(s) 29-36 is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/o	wn from consideration. r election requirement.			
9) ☐ The specification is objected to by the Examine 10) ☑ The drawing(s) filed on 30 October 2003 is/are Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) ☐ The oath or declaration is objected to by the Ex	: a)⊠ accepted or b)□ objected drawing(s) be held in abeyance. See ion is required if the drawing(s) is obj	e 37 CFR 1.85(a). ected to. See 37 CFR 1.121(d).		
Priority under 35 U.S.C. § 119				
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 				
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:	ite		

Art Unit: 2192

DETAILED ACTION

1. In view of the Appeal Brief (hereafter "Brief") filed on January 29, 2009, PROSECUTION IS HEREBY REOPENED.

To avoid abandonment of the application, appellant must exercise one of the following two options:

- (1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,
- (2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing below.

2. Claims 29-36 have been examined. In this Office action, the examiner maintains ground of rejection over claims 29, 31, 32, and 34-36. Applicant's arguments with respect to the rejection of dependent claims 30 and 33 have been fully considered and are persuasive. Therefore, the rejection over dependent claims 30 and 33 has been withdrawn. However, upon further consideration/search, a new ground of rejection is made as set forth in details below.

Response to Arguments

3. Applicants' arguments have been considered.

A. Independent claims 29 and 36 (Brief, pp. 4-8):

a) Limitations at issue "record a procedure description comprising a series of actions performed by a user in the application user-interface" (Brief, pp. 4-5).

The examiner respectfully disagrees with Appellants' assertions. Wolfman explicitly teaches:

a user-interface of an existing application (col.5, FIG. 2, user-interface of application SMARTedit, "an existing application" as recited in claim 29);

a control of the user-interface of the existing application performed by a user in the application user-interface (e.g., col.5, FIG. 2, said user-interface of application SMARTedit includes 4 buttons and one text display);

record a procedure description comprising a series of actions (e.g.,

"For example, a simple task for SMARTedit is to delete HTML comments from a text file. A user demonstrates this task by starting the macro recorder, moving the cursor to the next comment, selecting the comment with the shift and cursor keys, and pressing the delete key to delete it (Figure 2). She then stops the macro recorder. After this demonstration, one of SMARTedit's candidate programs is a program consisting of three actions of the form \move to the next occurrence of <!--, select to the next occurrence of --->, and delete the selection." (col.4: 60 – col.5: 26, emphasis added) and see further in col.4: 47- col.5: 26; col.12:56 - col.13: 6).

b) Limitations at issue "customizing the control of the user-interface of the existing application by installing a user-interface control relating to the procedure description in the existing application for automatic execution of the procedure description and generation of the series of actions performed by the user when the user-interface control is activated" (Brief, pp. 5-8).

The examiner respectfully disagrees with Appellants' assertions. Wolfman explicitly teaches:

<u>customizing</u> the control of the user-interface of the existing application <u>by</u> <u>installing a user-interface control</u> relating to the procedure description in the existing application (e.g., col.12, lines 12-23, an "<u>enhanced</u>" SMARTedit user-interface, i.e., the "original" user-interface in col.5, FIG. 2, now has been <u>enhanced/customized</u> with a

<u>enhanced/customized</u> user-interface in col.12, FIG. 4, wherein said <u>enhanced/customized</u> user-interface in FIG. 4 has a <u>new Interaction Control Panel</u> and the new Interaction Control Panel is <u>related to the macro recorded</u> in FIG. 2, i.e., "relating to the procedure description in the existing application" as claimed - emphasis added);

for automatic execution of the procedure description and generation of the series of actions performed by the user when the user- interface control is activated (e.g., an "enhanced" SMARTedit user-interface may have Performance Interaction Mode, in which it executes the macro recorded in FIG. 2:

"...the learning system takes full control and executes its concept autonomously on new examples. If implemented in SMARTedit, for example, performance mode might be useful once the system has learned a program to delete HTML comments. It can then proceed to delete all the comments in all of the HTML files in a directory. Moreover, this program might be applied to new files immediately or at a future date..." (col.6: 53 – col.7: 3, emphasis added); and

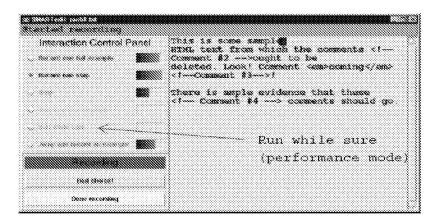


Figure 4: Screenshot of SMARTedit enhanced with DIAManD. The task, as in Figure 2, is to delete all HTML comments, and the first one has been deleted. The interactions are lined up on the left of (SMARTedit enhanced with DIAManD must have been installed, and operational to have this screenshot)

Application/Control Number: 10/697,752

Art Unit: 2192

Page 5

"The Run while sure" interaction immediately executes the learned program step by step until the system's confidence in the program at any step drops below a threshold (currently 99.9%). This interaction is a performance mode." (col.13: 12-16, emphasis added).

B. Dependent claims 30, 31, 32, 33, 34, and 35 (Brief, pp. 8-11):

a) Dependent claim 30 (Brief, pp. 8-9):

Applicant's arguments with respect to the rejection of dependent claim 30 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground of rejection is made in view of US Patent No. 5,748,975 as set forth in details below.

b) Dependent claim 31 (Brief, page 9):

The examiner respectfully disagrees with Appellants' assertion. Wolfman explicitly teaches "the operation of recording a procedure description performed by the user in the application user-interface comprises the step of registering the procedure capturer with the operating system to receive notification of user actions and system actions" (e.g., col.5: 18-26, the macro recorder embedded in application SMARTedit must have been registered with the operating system to be able to record said keystrokes, cursor keys, and mouse clicks, all of which are managed by said operating system).

c) Dependent claim 32 (Brief, pp. 8-9):

The examiner respectfully disagrees with Appellants' assertion. Wolfman explicitly teaches "the operation of recording a procedure description performed by the user in the application user-interface comprises the steps of: receiving notification of user action within the application interface at the procedure capturer; determining a result activated by user action at the procedure capturer; mapping the activated control

into a generic description at the procedure capturer adding the generic description to a procedure representation at the procedure capturer; determining if there are more user actions; and storing the procedure representation in the procedure capturer if there are no more user actions (e.g., col.4: 60 – col.5: 26,

Page 6

"For example, a simple task for SMARTedit is to delete HTML comments from a text file. A user <u>demonstrates</u> this task by starting the macro recorder, moving the cursor to the next comment, selecting the comment with the <u>shift and cursor keys</u>, and <u>pressing the delete key</u> to delete it (Figure 2). She then <u>stops the macro recorder</u>. After this demonstration, one of SMARTedit's candidate programs is a program consisting of three actions of the form: move to the next occurrence of <!--, select to the next occurrence of --->, and delete the selection." (emphasis added).

d) Dependent claim 33 (Brief, pp. 8-9):

Applicant's arguments with respect to the rejection of dependent claim 33 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground of rejection is made in view of US Patent Publication No. 2004/0078682 A1 as set forth in details below.

e) Dependent claim 34 (Brief, pp. 8-9):

The examiner respectfully disagrees with Appellants' assertion. Wolfman explicitly teaches "the at least one processor is further operative to execute an installed control" (e.g., col.12, lines 8-23, an "enhanced" SMARTedit user-interface by installing an "enhanced" SMARTedit application (SMARTedit enhanced with DIAManD now has been installed and has a screenshot as illustrated in FIG. 4), which now has a new Interaction Control Panel; wherein the new Interaction Control Panel is related to the macro recorded in FIG. 2, i.e., "relating to the procedure description in the existing application" as claimed).

Art Unit: 2192

f) Dependent claim 35 (Brief, pp. 8-9):

The examiner respectfully disagrees with Appellants' assertion. Wolfman explicitly teaches "the operation of installing the user-interface control comprises the step of altering the appearance of at least one existing user interface control" (e.g., col.5, FIG. 2, screenshot of the original SMARTedit; col.12, FIG. 4, screenshot of the enhanced SMARTedit).

Claim Rejections - 35 USC §102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 5. Claims 29, 31, 32, and 34-36 are rejected under 35 U.S.C. 102(b) as being anticipated by Wolfman (art of record, "Mixed Initiative Interfaces for Learning Tasks: SMARTedit Talks Back").

Claim 29:

Wolfman discloses an article for manufacture and an apparatus for customizing a control of a user-interface of an existing application comprising:

a memory; and at least one processor (e.g., col.3:42 - col.4: 28), coupled to the memory operative to:

a user-interface of an existing application (col.5, FIG. 2, user-interface of application SMARTedit ("an existing application") as recited in claim 29, lines 1 and 6-7);

a control of the user-interface of the existing application (e.g., col.5, FIG. 2, said user-interface of application SMARTedit includes 4 buttons and one text display);

Application/Control Number: 10/697,752

Art Unit: 2192

(i) record a procedure description comprising a series of actions (e.g., col.4: 29-34; col.4: 47- col.5: 26; col.12:56 - col.13: 6)

Page 8

performed by a user in the application user-interface (e.g., col.4:28 - col.5: 27; FIG. 2 at col.5); and

(ii) customizing the control of the user-interface of the existing application (e.g., col.12, lines 8-23, an "enhanced" SMARTedit user-interface by installing an "enhanced" SMARTedit application (SMARTedit enhanced with DIAManD now has been installed and has a screenshot as illustrated in FIG. 4), which now has a new Interaction Control Panel; wherein the new Interaction Control Panel is related to the macro recorded in FIG. 2, i.e., "relating to the procedure description in the existing application" as claimed)

by installing a user-interface control relating to the procedure description in the existing application (e.g., col.13: 22-37; FIG. 4, col.12:12 - col.13: 6)

for automatic execution of the procedure description and generation of the series of actions performed by the user when the user-interface control is activated (e.g., col.13: 7-27; col.1: 1-28; col.4; 59 - col.5: 26).

Claim 31:

The rejection of claim 29 is incorporated. Wolfman explicitly teaches "the operation of recording a procedure description performed by the user in the application user-interface comprises the step of registering the procedure capturer with the operating system to receive notification of user actions and system actions" (e.g., col.5: 18-26, the macro recorder embedded in application SMARTedit must have been registered with the operating system to be able to record said keystrokes, cursor keys, and mouse clicks, all of which are managed by said operating system).

Claim 32:

The rejection of claim 29 is incorporated. The examiner respectfully disagrees with Appellants' assertion. Wolfman explicitly teaches "the operation of recording a procedure description performed by the user in the application user-interface comprises

the steps of: receiving notification of user action within the application interface at the procedure capturer; determining a result activated by user action at the procedure capturer; mapping the activated control into a generic description at the procedure capturer adding the generic description to a procedure representation at the procedure capturer; determining if there are more user actions; and storing the procedure representation in the procedure capturer if there are no more user actions (e.g., col.4: 60 – col.5: 26,

"For example, a simple task for SMARTedit is to delete HTML comments from a text file. A user <u>demonstrates</u> this task by starting the macro recorder, moving the cursor to the next comment, selecting the comment with the <u>shift and cursor keys</u>, and <u>pressing the delete key</u> to delete it (Figure 2). She then <u>stops the macro recorder</u>. After this demonstration, one of SMARTedit's candidate programs is a program consisting of three actions of the form: move to the next occurrence of <!--, select to the next occurrence of -->, and delete the selection." (emphasis added).

Claim 34:

The rejection of claim 29 is incorporated. Wolfman explicitly teaches "the at least one processor is further operative to execute an installed control" (e.g., col.12, lines 8-23, an "enhanced" SMARTedit user-interface by installing an "enhanced" SMARTedit application (SMARTedit enhanced with DIAManD now has been installed and has a screenshot as illustrated in FIG. 4), which now has a new Interaction Control Panel; wherein the new Interaction Control Panel is related to the macro recorded in FIG. 2, i.e., "relating to the procedure description in the existing application" as claimed).

Claim 35:

The rejection of claim 29 is incorporated. Wolfman explicitly teaches "the operation of installing the user-interface control comprises the step of altering the

Art Unit: 2192

appearance of at least one existing user interface control" (e.g., col.5, FIG. 2, screenshot of the original SMARTedit; col.12, FIG. 4, screenshot of the enhanced SMARTedit).

Claim 36:

Claim 36 is an article of manufacture version, which recites the same limitations as those of claim 29, wherein all claimed limitations have been addressed and/or set forth above. Therefore, as the reference teaches all of the limitations of the above claim, it also teaches all of the limitations of claim 36.

Claim Rejections – 35 USC §103

- 6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 7. Claim 30 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wolfman in view of US Patent No. 5,748,975 to Van De Vanter (art made of record, hereafter "Van De Venter").

Claim 30:

The rejection of claim 29 is incorporated. Wolfman discloses recording keystrokes, cursor moves, and mouse clicks (col.4: 49-54, col.5: 10-17; col.10: 46-54) does not explicitly disclose the operation of recording a procedure description performed by a user in the application user-interface comprises the steps of transmitting at least one request for application user-interface structure information from a procedure capturer to an operating system and receiving the application user-interface structure information from the operating system at the procedure capturer.

Art Unit: 2192

However, in an analogous art, Van De Vanter further discloses the operation of recording a procedure description performed by a user in the application user-interface comprises the steps of:

transmitting at least one request for application user-interface structure information (e.g., FIG. 1, col.8: 33-67, Input Device 112 generates events from keystroke, cursor, mouse, each event has particular data structure)

from a procedure capturer to an operating system (e.g., FIG. 1, col.7: 25-46, Input Device 112 sends events to Operating System 120 and Keystroke Executive 130, col.7: 46 - col.8: 11) and

receiving the application user-interface structure information from the operating system at the procedure capturer (e.g., FIG. 2, col.9: 42-59, Operating System 120 and Keystroke Executive 130 send said event information to Typographical Display Processor 170 and Display 118, col.9: 8-41).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to combine Van De Vanter's teaching into Wolfman's teaching. One would have been motivated to do so to record event stream such as keystrokes, mouse/cursor clicks, which are managed/controlled by the operating system as suggested by Van De Vanter (e.g., col.7: 25-46).

8. Claim 33 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wolfman in view of US Patent Publication No. 2004/0078682 A1 to Huang (art made of record, hereafter "Huang").

Claim 33:

The rejection of claim 29 is incorporated. Wolfman does not explicitly disclose the operation of installing the control relating to the procedure description in the existing application comprises the steps of sending a request to an operating system from a control installer to install the control; creating and installing the control in the application user-interface through the operating system; and registering a callback at the operating system using a location supplied by the control installer.

Art Unit: 2192

However, in an analogous art, Huang further discloses the operation of installing the control relating to the procedure description in the existing application comprises the steps of:

sending a request to an operating system from a control installer to install the control (e.g., [0005], [0050]);

creating and installing the control in the application user-interface through the operating system (e.g., [0007], [0019], [0050]); and

registering a callback at the operating system using a location supplied by the control installer (e.g., [0009], [0012]).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to combine Huang's teaching into Wolfman's teaching. One would have been motivated to do so to register a callback function for understanding whether a hardware status has been changed is to use the polling or interrupt mechanism to trigger the registered callback function as suggested by Huang (e.g., [0012]).

Conclusion

9. Any inquiry concerning this communication should be directed to examiner Thuy Dao (Twee), whose telephone/fax numbers are (571) 272 8570 and (571) 273 8570, respectively. The examiner can normally be reached on every Tuesday, Thursday, and Friday from 6:00AM to 6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Q. Dam, can be reached at (571) 272 3695.

The fax phone number for the organization where this application or proceeding is assigned is (571) 273 8300.

Any inquiry of a general nature of relating to the status of this application or proceeding should be directed to the TC 2100 Group receptionist whose telephone number is (571) 272 2100.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published

Art Unit: 2192

applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Thuy Dao/ Examiner, Art Unit 2192 /Tuan Q. Dam/
Supervisory Patent Examiner, Art Unit 2192